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USDA Soybean Germplasm Report

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VI. USDA SOYBEAN GERMPLASM REPORT

We would like to use the Soybean Genetics Newsletter as a means of making an annual report on the USDA soybean germplasm collection at Urbana, Illinois, U.S.A.

In September 1978, Randall L. Nelson accepted a position of research geneticist with the USDA and has been assigned to work with the soybean germplasm collection at Urbana. His major duties will be evaluation and utilization of the collection and, with your cooperation, compilation of data already collected on the soybean germplasm.

We will be contacting many of you by letter requesting information which your research has provided concerning the germplasm collection. If we are unable to contact you by letter and you have information you would like to share, it would be most welcome. Please include the character(s) studied, the lines which were screened, the years during which the research was conducted, the method(s) used in screening and the system of scoring, if applicable, and the results of the work. References to publications involving the germplasm collection are also being solicited.

The germplasm collection at Urbana has almost doubled in size in the last five years. The collection now includes 6015 lines. A breakdown of this material is given in Table 1.

The PI collection includes 427 lines (PI 423,973 - PI 424,617) which were added after the harvest of 1978. These were obtained from China (3), Hungary (4), Japan (15), South Korea (390), Poland (1), and Yugoslavia (14). Approximately 90% of the lines came from South Korea where primitive land races are still widely grown in gardens and small plots. The large number of recent additions from Korea are due to the work and cooperation of Dr. Shin Han Kwon of the Korean Atomic Energy Institute in Seoul and Dr. Keun Yong Park of the Office of Rural Development, Crop Experiment Station, in Suweon, who have thoroughly collected in South Korea and have generously made this material available to us.

Table 1
Material in the USDA soybean germplasm collection
at Urbana (January 1, 1979)

Designation	Number of lines
PI collection	4582
FC collection	51
Isolines	300
Type collection	101
Domestic varieties	252
Glycine soja	558
Perennial species	171
Total	6015

Also listed in Table 2 are 69 lines which are later in maturity than Group IV. These lines have been sent to the southern germplasm collection at Stoneville, Mississippi.

The collection of Glycine soja has been increased by 180 lines this year (PI 423,988 - PI 424,130). These accessions were obtained from Siberia (19) and Korea (161).

As the germplasm collection has grown, so has the distribution of the seed from the collection. Table 3 summarizes the distribution from Urbana for the last four years and for 1970. In addition, approximately 75 requests are filled each year for researchers at the University of Illinois.

More information and/or seeds from the collection may be obtained by writing to Dr. R. L. Bernard, Department of Agronomy, Turner Hall, University of Illinois, Urbana, Illinois 61801, U.S.A.

Table 2
Maturity group listing of the latest additions
to the soybean collection

Maturity group	Number of lines
0	12
I	9
II	3
III	30
IV	373
V and VI	69
Total	496

Table 3
Distribution of material from the soybean
germplasm collection at Urbana

Year	Number of requests	Number of lots distributed	States within the USA requesting seeds	Other countries requesting seeds
1970	155	9,000	31	7
1975	200	8,000	30	23
1976	250	18,000	36	25
1977	250	11,000	37	23
1978	250	10,000	32	22

Randall L. Nelson—USDA
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